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ABSTRACT

This report describes a cross-age tutoring program implemented to improve reading comprehension skills in a group of regular students in a rural elementary school. A targeted group of four fifth-grade students and four second-grade students were matched for cross-age tutoring sessions. The students developed reading comprehension skills through the use of the strategies of Question/Answer/Relationship Technique and context clues. The fifth-grade targeted students were first instructed in the above strategies and then allowed to practice them, so that they internalized and transferred the skills to the fifth-grade reading comprehension level. The fifth-grade students' levels of self confidence and attitudes toward reading improved as a result of functioning as experts during the cross-age tutoring sessions. The second-grade students benefited by being able to read the entire story aloud with immediate corrective feedback and reinforcement, and also from being asked every inferential "guided reading question" suggested in the teacher's edition of the basal reader. If the student was unable to answer the guided reading question, a more experienced tutor was able to guide the student in the correct procedure for understanding what was read. Levels of success were measured by pretests and posttests of various kinds. Most participants, both fifth and second graders, showed considerable gains in their reading ability and attitudes. (Contains 7 tables of data and 12 references. Appendixes include surveys, context clues map, and story map.) (Author/TB)

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USING CROSS-AGE TUTORING TO IMPROVE READING COMPREHENSION SKILLS IN ELEMENTARY LANGUAGE ARTS STUDENTS

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by

Janet C. Collier

A Practicum Report

Submitted to the Faculty of the Abraham S. Fischler Center for the Advancement of Education of Nova Southeastern University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in a National Database System for reference.

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Abstract

Using Cross-Age Tutoring to Improve Reading Comprehension Skills in Elementary Language Arts Students.
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Descriptors:Cross-Age Tutoring/Reading Comprehension/Metacognition/Reading Strategies/Elementary Education/Students As Teachers/Peer Teaching.

This report describes a cross-age tutoring program implemented by the author to improve reading comprehension skills in a targeted group of regular students in a rural elementary school. A targeted group of four fifth grade students and four second grade students were matched for cross-age tutoring sessions. The students developed reading comprehension skills through the use of the strategies of Question/Answer/Relationship technique and context clues. By first instructing the fifth grade targeted students in the above strategies, and then practicing use of the strategies through tutoring second grade students, the targeted fifth grade students internalized and transferred the skills to the fifth grade reading comprehension level. The fifth grade students' levels of self-confidence and attitudes toward reading improved as a result of functioning as experts during the cross-age tutoring sessions. The second grade students benefited by being able to read the entire story aloud with immediate corrective feedback and reinforcement. The second grade students also benefited from being asked every inferential "guided reading question" suggested in the teacher's edition of the county adopted basal reader. If the student was unable to answer the guided reading question, a more experienced tutor was able to guide the student in the correct procedure for understanding what was read. Levels of success were measured by pretests and posttests of the Kaufman Test of Educational Achievement and the Silver Burdett & Ginn

Placement Tests. In addition, levels of success were measured by three researcher-developed instruments, the Collier Reading Attitude Inventory (Appendix E:96), the Reading Comprehension Awareness Checklist (Appendix C:92), and the Context Clues Chart (Appendix D:94). The results of posttesting revealed that the fifth grade targeted students' reading comprehension ability did improve. The results varied, with 50 percent of the participants gaining more than one year grade equivalency as measured by the Kaufman Test of Educational Achievement. Very substantial gains were demonstrated in the fifth grade posttests of the Silver Burdett & Ginn Placement Test. Two out of three second grade participants also showed gains in posttest scores of over one half year. All participants' attitudes toward reading improved as a result of this cross-age tutoring project. An added benefit of the tutoring program was the increase in self-esteem and self-confidence exhibited by most participants. Overall, the cross-age tutoring program was successful. Appendices include the Parent Survey (A:88), the Teacher Survey (B:90), the Reading Comprehension Awareness Checklist (C:92), the Context Clues Chart (D:94), the Collier Reading Attitude Inventory (E:96), the Story Map (F:98), the Silver Burdett & Ginn Permission (G:100), and the Plus/Delta Meeting Form (H:102).

Authorship Statement/Document Release

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my work, presented here, will earn similar respect.

Janet C Collier
student's signature

Document Release

Permission is hereby given to Nova University to distribute copies of this applied research project on request from interested parties. It is my understanding that Nova University will not charge for this dissemination other than to cover the costs of duplicating, handling, and mailing of the materials.

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June 28, 1995
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CHAPTER I

Purpose

The elementary school involved in this project was located in a rural community in the southeastern part of the United States. The area had experienced little economic growth, so consisted of a few small businesses and two large industrial sites. Even though there were some well established homes in the area, the majority of families lived in trailer parks and small rented quarters. From outside appearances, the dwellings and surrounding property showed obvious signs of neglect, evidenced by a lack of care and maintenance. The vehicles frequenting the school site during afternoon dismissal were generally untidy, poorly maintained older models.

The socio-economic status of the targeted school population ranged from lower middle to lower income. This was evidenced by 78.4 percent of the students receiving breakfast and/or lunch at a reduced price or free. Information gleaned from the Parent Survey (Appendix A:88) conducted by this researcher, revealed

that 65 percent of the surveyed students lived in single parent homes.

Because of the low socio-economic status of the area, this targeted school had been designated a Schoolwide Project site. Schoolwide Projects is a federally funded program that provides a whole-school approach to delivery of Chapter 1 services. The difficulties generally experienced in low socio-economic areas became the rationale for the increased benefits to schools in such areas. The benefits provided to this targeted school were: lower teacher/pupil ratio (20 to one in kindergarten through third grade and 25 to one in the fourth and fifth grades); a second guidance counselor; the services of a full time social worker and nurse's aide; a part time nurse; increased psychological services; and two full time certified teachers to implement the first grade tutorial program, Accelerated Literacy Learning.

Despite the low socio-economic status of this targeted school, the generous spirit of parents, students, and staff had been a constant over time. For 12 years this school had earned the Golden School Award for the massive accumulation of volunteer hours donated for the advancement of student progress (over 10,000 hours donated in the 1993-1994 school year). Despite

the low economic status of this school's population, the annual Red Cross drive had always been a huge success. In the 1994 drive, this targeted school was the top contributor for all 107 elementary schools in the district. Through the Junior Red Cross, this targeted school adopted a residential retirement facility called The Home. The students at this targeted school worked together to provide favors, placemats, and cards to each resident four times a year. In addition, the school chorus performed a Christmas and Easter concert for the residents. In addition, this targeted school had been designated as a Red Carpet School by the state Department of Education, for providing a friendly and helpful environment.

This targeted school's faculty and staff gave so generously in the 1993-1994 annual United Way Campaign that the school was awarded recognition for the Greatest Gift Based on School Staff Size for the entire county. The targeted school also was awarded the 1993-1994 United Way Certificate of Appreciation for Outstanding Support to the People of the Community for donating the greatest gift among all the elementary schools in the county.

The basic beliefs upon which this targeted school operated were revealed through the faculty/staff

developed Vision Statement. All facets of the targeted school reflected this Vision Statement, "...students will be empowered by a network of parents, educators, and staff to become productive citizens with creativity and the potential to explore, learn and grow" (Parent Handbook, 1994). The foci of this school's policies and programs were on providing students with opportunities for growth, and then encouraging continued growth through recognition of accomplishments.

Many leadership opportunities were provided to students through participation in the Student Council, a peer facilitating program which gave older students the opportunity to help younger ones in various capacities, an Attendance Activator program which used members of the fourth grade drop-out prevention program to encourage consistent attendance in habitual truants, and the Junior Educational Media Specialist (JEMS) program. In addition, approximately 100 students a year were trained to produce the weekly closed-circuit television show, WKID. Students assumed the roles of anchor person, camera person, prop person, and stage hand. These same students became daily intercom announcers leading the school in the Pledge of Allegiance and a patriotic song.

Another major goal of the targeted school was to provide public recognition to as many students as possible. With this goal in mind, each teacher chose one student a week as a Principal's Pride member. These students were featured on the WKID television show and received a special sticker and certificate. Once a month, one student per teacher was designated as a "Terrific Kid" and was honored through the Terrific Kid program sponsored by the local Kiwanis Club. These students were also featured on the WKID television show. In addition, any member of the school could submit a note of recognition, honoring a student for acts of kindness, good work, or diligence. These notes were read by the principal over the intercom during the morning announcements. Also, at the end of each marking period, students were publicly recognized for achievement and attendance in grade level assemblies. These students received certificates and special recognition pins for earning a place on the Principal's Honor Roll, Honor Roll, and Citizenship Honor Roll. To enable the principal to recognize even more students, a Progress Award was presented to any student who improved in any subject while maintaining all other past grades. To recognize conscientious attendance, a Perfect Attendance Award was presented.

This targeted school's population experienced difficulties with consistent school attendance. During the 1994-1995 school year, the average daily student attendance was only 91 percent with 24 percent of the students being absent between 11 and 20 days during the academic year, and nearly 17 percent missing over 21 days of school. One major cause of excessive absences was the high incidence of pediculous (head lice) and nits (lice eggs). In September of this 1994-1995 academic year, a school-wide head check revealed 239 cases of either live head lice or nits. All these students had to remain out of school until the lice and/or nits had been removed. This was a tedious process, one which some parents were slow to tackle. Therefore, two weeks after the initial head check, 35 students had still not returned to school. In January of 1995, another school-wide head check was conducted, and 291 cases of live head lice and/or nits were discovered. Again, many students were slow returning to school.

To help achieve the major goal of developing productive citizens, an emphasis had been placed on increasing student attendance. In addition to individual student recognition for perfect attendance each nine weeks, the class in each grade level with the

highest attendance per month was announced on the WKID television program, presented with a trophy, and given a popcorn party. To encourage the habitual truants to attend school regularly, a special peer interaction program had been implemented. Fourth grade students called Attendance Activators were each assigned to a particular truant to encourage consistent attendance through various incentives.

This targeted school also experienced difficulties due to a mobility rate of 87.1 percent. This high mobility rate was due in part to parental employment in two highly transient occupations, traveling carnival workers and field hands (migrant workers). Having a high mobility rate challenges a school with instructional difficulties not faced by more stable schools.

Many of the students attending this targeted school lacked the social skills necessary to get along well with others. This targeted school experienced 32 incidents of assault, five cases of battery, three incidents of weapon possession, and 19 incidents of fighting during the 1993-1994 school year. Since the targeted school's vision was to develop productive citizens, a school-wide Social Skills Training Program was implemented.

An average of 887 students attended pre-kindergarten through the fifth grade and exceptional student education classes at this targeted school. The distribution of the school's population was 80.6 percent white, 10.8 percent Hispanic, 7.8 percent black, .5 percent Asian, and .3 percent Indian.

This targeted school offered many growth opportunities for students with special needs. Thirteen students were in the Educable Mentally Handicapped (EMH) class. Ninety-five students received speech and/or language services. Forty-one students were served daily in part-time Specific Learning Disability (SLD) classes. Thirty-six students received the part-time services of the Academically Gifted Program. Fourteen students attended Emotionally Handicapped (EH) services on a part-time basis and 22 students attended full-time EH classes at this school site. In addition, this school site housed three Severely Emotionally Disturbed (SED) classes servicing 25 students in all. Forty-seven students in kindergarten through fifth grade received small group instruction in English for Speakers of Other Languages (ESOL) classes. Two special full-time drop-out prevention programs served 38 fourth and fifth grade students. Special classes were also available for

students with hearing and vision impairments. Occupational and physical therapy were also available.

Since the targeted school's Vision Statement focused on empowering students through a network of parents, educators, and staff, the targeted school provided many opportunities for parent involvement. In addition to the twice a year Open House nights, the school also offered evening teacher/parent conferences, a monthly PTA meeting, monthly skating parties, an annual Success in Math and Reading Together (SMART) Night, open School Improvement Team meetings, and opportunities for parent volunteers. The targeted school was so serious about providing opportunities for parent involvement, that school funds were designated for bus service to many of the events for parents who would be unable to attend functions due to transportation problems.

Another approach to helping students develop into productive citizens was through providing educational opportunities for parents. Of those responding to the researcher's Parent Survey (Appendix A:88), 35 percent of the parents did not graduate from high school. To provide the opportunity to learn the basic skills necessary to pass the General Equivalency Diploma exam, improve basic literacy skills, and/or improve parenting

skills, this school site had become a Family Learning Center. Adult education classes were held in the evenings two nights a week, and during the day in the summer months. Additional parental education and support was provided in monthly meetings through the Exceptional Education Department at the targeted school. Free childcare was offered for parents wishing to attend any of the adult education programs.

During the 1994-1995 academic year, this school lost both the principal and assistant principal. The faculty and staff adjusted well to the change and continued work with few disruptions to procedures during the two month interim. A new principal and assistant principal have been assigned, and the faculty was pleased with the selections. The new principal had been an assistant principal for six years at a local school site with a similar population, and the new assistant principal had been a teacher at the targeted school site for the past eight years.

The faculty also had a high incidence of mobility. The mobility rate for the 1993-1994 school year was 28.8 percent. This targeted school was not one that attracted veteran teachers. Instead, beginning teachers and those new to the area were more likely to apply for positions. This was evidenced by the fact

that 45 percent of the instructional staff had from zero to three years teaching experience, 15 percent had four to nine years teaching experience, and 40 percent had 10 or more years teaching experience. Most of the latter had been a part of the targeted school's staff for many years. Seventy-three percent of the staff have earned Bachelor's Degrees, 25 percent have earned Master's Degrees, and two percent have earned Specialist's Degrees.

This targeted school site was 35 years old, but very well maintained. In the last three years, the entire school had been painted both inside and outside, the cafeteria had been renovated, the teachers' lounge had been improved with paneling and new furniture, new sidewalks had been added, fencing had been provided around the entire perimeter, walkway lights had been installed, and white boards had replaced chalkboards in all the classrooms. In addition, a large sign had been installed in the front of the school to announce upcoming events of interest to the community.

The author's role at this school site was teaching fourth grade language arts. The author was also the county level Intermediate Language Arts Contact Person for the targeted school. This author had conducted teacher training workshops for teachers involved in the

state writing assessment program. The author had a total of 17 years teaching experience with eight of those years at the targeted school. The author had served four years as a Peer Teacher, helping beginning teachers through the state mandated Beginning Teacher Program. Over the last eight years at this site, the author had taught kindergarten, third, and fourth grades. While teaching these grade levels, the author had noticed a deficiency in reading comprehension skills.

Understanding what is read is of utmost importance to people of all ages. Yet, the reading comprehension scores on achievement tests continued to show widespread deficiencies in this targeted school.

The 1993-1994 Stanford Achievement Test (SAT) scores showed that 70 percent of the students at this school site scored below the national middle score in reading comprehension. No more than 50 percent should score below the mean.

There was a discrepancy of 20 percent between the number of students scoring below the mean in reading comprehension, and those who would be expected to score below the mean. The author concluded that there was a definite need to improve the reading comprehension skills of the students at this school so that no more

than 50 percent scored below the mean. Determining the causes of the low reading scores and how to improve the reading comprehension skills of this school's student population was worthy of study and concerted effort.

Since this targeted school site was located in a low income area, with 78.4 percent of the students receiving free or reduced price meals, one can surmise that the typical problems characteristic of low socio-economic status (SES) areas were also a part of the children's lives at this school site. Some typical problems evident at this targeted site were lack of parenting skills and education.

To establish background information for this report, the parents/guardians of all second, third, and fourth grade students in this targeted school were surveyed (Appendix A:88) through an instrument created by this author. The surveys were sent home via the students. Fifty-eight percent responded for a total of 251 returned surveys (Table 1:14).

Only 15 percent of the adults responding to the Parent Survey reported completing degrees from institutes of higher learning or receiving additional formal training after graduating from high school. Thirty-five percent reported leaving high school before graduating.

Table 1

Parent Survey-Part One

Question	Response	Percent
Highest grade completed	Grade 7	2%
	Grade 8	2%
	Grade 9	6%
	Grade 10	10%
	Grade 11	15%
	Grade 12	50%
	2-Year degree	4%
	4-Year degree	3%
	Other	8%

The 1993-1994 SAT reading comprehension scores for each grade level at the targeted school, first grade through fifth grade (Table 2:14), showed low reading comprehension scores in each grade level.

Table 2

Target School
1993-1994 Stanford Achievement
Test Comprehension Scores

Grade Level at Time of Test	Current Grade Level	Percent Below the National Middle Score	Percent Above the National Middle Score
1	2	80	20
2	3	75	25
3	4	59	41
4	5	72	28
5	6-no longer at this school	66	34

When surveyed (Appendix B:90) about the possible causes for the severe lack of reading skills of this school's population, the teachers at this targeted school responded in the following way: 100 percent agreed or strongly agreed that more than likely these below average readers had not been read to or with consistently at home; 80 percent agreed or strongly agreed that the reading curriculum does not fully meet the needs of the below average reader, inhibiting students from progressing at an average rate; 100 percent agreed or strongly agreed that these below average readers would benefit from one-on-one instruction; 100 percent agreed or strongly agreed that these students did not receive parental one-on-one help with homework on a consistent basis.

One of the causes of the 20 percent discrepancy between the total number of students scoring below the mean in reading comprehension, and those who would be expected to score below the mean, might be revealed by the SAT reading scores of the first grade students. Eighty percent of the first graders scored below the mean in both reading comprehension and total reading. The first grade students' scores were lower than any other grade in the targeted school.

This author shared the results of the first grade SAT scores with a highly respected teacher at the targeted school. The teacher remarked,

> When 80 percent of the first grade students score below the mean, it's obvious that the students lacked readiness skills when they came to us (Hobart, 1995).

According to the pamphlet, "Why Should I Read To My Preschooler?"

> Children with parents who provide positive daily reading sessions are generally considered the fortunate ones who experience early success in school. The foundation for this early success is often the result of having had several advantages: parents who value and enjoy reading, serving as role models for their children; a variety of reading materials in their homes; book-sharing sessions on a consistent basis; and numerous opportunities to talk about experiences and books (Collier & Folk, 1992).

Part Two of the Parent Survey (Appendix A:88) was used to establish background information about how often the students attending this targeted school had been read to in the formative early years of birth to five years old (Table 3:17).

According to the survey, only 30 percent of the students were read to on a consistent basis in their preschool years when readiness skills should have been developing. If parents were unaware of the importance of being the children's first teachers, consistently reading and discussing books with the children

throughout the pre-school years, the children may very well begin school without the readiness skills so necessary for success. When students begin their school experience without the needed readiness skills, they are at risk of experiencing failure and frustration at school. Without specialized programs designed to compensate for the lack of readiness skills, it is extremely difficult for these "at-risk" students to catch-up and eventually work on grade level.

Table 3

Parent Survey-Part Two

Question	*Response - Percent*	
How often was the child read to or with:		
a. from birth - 5 years	daily	30%
	weekly	10%
	sometimes	16%
	rarely	6%
	almost never	1%
	no response	37%
b. kindergarten	daily	26%
	weekly	13%
	sometimes	18%
	rarely	6%
	almost never	1%
	no response	36%

Continuing with Ms. Hobart's (1995) remarks,

> The teachers at this school are working as hard as they can, but their efforts aren't reflected in student achievement. We need to think of some different approaches to solve these problems.

Reading comprehension scores at the targeted school were below the national middle score in all grade levels. After much consideration, the author decided to begin solving the problem with second and fifth grade students. The second grade was selected because the 1993-1994 SAT scores indicated the greatest need for improvement. The fifth grade was selected because the 1993-1994 SAT scores were severely low in reading comprehension, and these students needed special help before moving into a middle school setting.

The author had chosen eight targeted students, four students in the second grade and four in the fifth grade. The second grade targeted group consisted of three boys and one girl. The fifth grade targeted group consisted of one boy and three girls. The targeted students were all average or adequate decoders and below average comprehenders based on SAT scores and teacher observation. The 1993-1994 SAT scores of the targeted fifth grade students, indicated a grade equivalency at least one grade level below the

students' actual grade level at the time of testing. The second grade targeted students' grade equivalencies were each nearly one-half grade level below the students' actual grade level at the time of the test. The teachers of the targeted students reported that the students were generally well behaved and should work well with another student. None of the targeted students had been identified as learning disabled and, other than weekly speech classes, received no special services at this school site.

Reading comprehension pretest scores were listed below (Table 4:20). The scores were obtained through group testing of all eight targeted students, using the Silver Burdett & Ginn Placement Tests, Level Four for the second grade students (Students A - D) and Level 11 for the fifth grade students (Students E - H).

The placement scores for the second grade targeted students, A - D, revealed an even larger reading comprehension problem than disclosed in the SAT reading comprehension test scores (Table 5:20). All four targeted second grade students were unable to decode the Level Six (beginning second grade) Placement Test, so the Level Four Placement Test (a first grade level placement test) was administered.

Table 4

Pretest Reading Scores Silver Burdett & Ginn Placement Test Scores and the Kaufman Test of Educational Achievement (K-TEA) Reading Comprehension Subtest

Student	Placement Test Percent Correct	K-TEA Grade Equivalency
Student A	50	1.2
Student B	32	1.6
Student C	0	0.5
Student D	34	1.0
Student E	60	3.3
Student F	27	4.5
Student G	45	6.4
Student H	53	6.4

The 1993-1994 SAT reading comprehension scores for each targeted student are listed below (Table 5:20). Students A, B, C, and D are the second grade targeted students. Students E, F, G, and H are the fifth grade targeted students.

Table 5

1993-1994 SAT Grade Equivalency Reading Comprehension Scores For Each Targeted Student

Student	Grade equivalency	Discrepancy in grade equivalency
Student A	1.4	.4
Student B	1.4	.4
Student C	1.4	.4
Student D	1.3	.5
Student E	2.3	2.5
Student F	2.7	2.1
Student G	2.4	2.4
Student H	3.2	1.6

The reading comprehension scores for all the targeted students were below grade level, with students E, F, and G scoring over two grade levels below expected. A special intervention was needed to help bring the targeted students' reading comprehension ability closer to the students' correct grade level.

The author implemented a cross-age tutoring project designed to develop reading comprehension skills in four targeted fifth grade students and four targeted second grade students. In addition, the author also proposed to teach the targeted students to develop critical thinking skills through the awareness of two reading comprehension strategies, inference and context clues. Finally, through the cross-age tutoring project, the author proposed to improve the targeted students' attitude toward reading.

The author's proposed cross-age tutoring program was designed to help the targeted second grade students build success in the basal reading series that will be used in this targeted school for the next several years. The fifth grade was chosen as a targeted group because these students needed to improve reading comprehension skills before moving into the middle school setting.

The proposed objectives of this project are listed below. Upon completion of this 12-week cross-age tutoring program at least six of the eight targeted second and fifth grade students will show a gain of one or more years grade equivalency in reading comprehension on the Kaufman Test of Educational Achievement.

Upon completion of this 12-week cross-age tutoring program, at least three of the four targeted fifth graders will demonstrate improvement in reading comprehension skills as measured by achieving a grade of 75 percent or greater on the Silver Burdett & Ginn Level 11 Placement Test.

Upon completion of this 12-week cross-age tutoring program, at least three of the four targeted second graders will demonstrate improvement in reading comprehension skills as measured by achieving a grade of 75 percent or greater on the Silver Burdett & Ginn Level Four Placement Test.

After participating in the 12-week program, at least three of the four targeted fifth grade students will demonstrate an improvement of critical thinking skills as related to awareness and use of reading comprehension strategies as measured by achieving a minimum score of 85 percent on the Reading

Comprehension Awareness Checklist (Appendix C:92) created by the researcher, accompanying "A Good Chance," the final fifth grade story used in this cross-age tutoring project.

After participating in the 12-week program, at least three of the four targeted second grade students will demonstrate an improvement of critical thinking skills in relation to awareness and use of reading comprehension strategies as measured by achieving a minimum score of 85 percent on the Reading Comprehension Awareness Checklist created by the researcher (Appendix C:92) accompanying "Maggie and the Goodbye Gift," the final second grade story used in this project.

After participating in the 12-week cross-age tutoring program, at least three of the four targeted fifth grade students will demonstrate an improvement of critical thinking skills in relation to awareness and use of context clues as measured by achieving a score of 85 percent or greater on the Silver Burdett & Ginn Level 11 Skills Practice page 174.

Upon completion of the 12-week cross-age tutoring program, at least 75 percent of the targeted fifth grade students will demonstrate an improvement of

critical thinking skills in relation to awareness and use of context clues as measured by achieving a score of 85 percent or greater on the Context Clues Chart created by the researcher (Appendix D:94) accompanying "A Good Chance," the final fifth grade story used in this project.

In addition, upon completion of the 12-week cross-age tutoring program, at least three of the four targeted second grade students will demonstrate an improvement of critical thinking skills in relation to awareness and use of context clues as measured by achieving a score of 85 percent or greater on the Context Clues Chart (Appendix D:94) accompanying "Maggie and the Goodbye Gift," the final second grade story used in this project.

Finally, after participating in the 12-week cross-age tutoring program at least six of the eight targeted students will have improved their attitude toward reading as measured by a positive move of one or more increments on the Collier Reading Attitude Inventory (Appendix E:96) created by the researcher.

CHAPTER II

Research and Solution Strategy

Comprehending what one reads is important, not only to school reading classes, but also to doing one's best in all classes. In addition, understanding what is read is critical for success in life skills such as following directions and learning new things. Thus, the subject of developing the skills to comprehend what is read has become a major topic of research.

It is widely accepted that reading comprehension can be taught. Exploring that premise, effective methods of developing reading comprehension, and possible effects of cross-age tutoring are the foci of this section of the author's practicum report.

Research conducted by Haller, Child, and Walberg (1988) suggested that there is a substantial effect of metacognitive instruction on reading comprehension, and that reading comprehension can be taught. Twenty previously implemented studies involving 1,553 students were analyzed to assess the effect of metacognitive instruction on reading comprehension. The studies were

chosen because they were the only ones discovered that used instruction in metacognitive strategies, had a control group, and provided an adequate amount of information to compute effect sizes. As each article was analyzed, pertinent information was recorded on coding sheets that were divided into 11 areas (study identification, setting, subject characteristics, treatment characteristics, procedural threats to validity, three metacognitive skills [awareness, monitoring, adjusting], description of method of instruction, whether a follow-up was conducted, other threats to validity). The findings of the coded information on all 20 studies were then transformed into effect sizes. The average effect size was .71, which is one of the larger ones in educational research. The effect sizes of reinforcement, instructing students to vary reading pace, giving instructional cues and feedback, cooperative learning, and acceleration exceeded the mean effect size of .71. The authors of the study concluded that comprehension can be taught, the average effect of metacognitive instruction on reading comprehension is substantial, the most effective metacognitive skills are self-questioning and textual inconsistency, and reinforcement was the most effective teaching strategy.

The International Reading Association published a pamphlet titled "New Directions in Reading Instruction" (1988). This pamphlet was designed to give teachers access to an overview of current research on some of the interactive models of teaching reading. Some of the models discussed were modeling teaching strategies, question/answer/relationship, and graphic organizers.

According to the pamphlet, strategic teachers are depicted as ones who emphasize providing assistance during reading, knowing how you know, making cognitive skills tangible, and providing advice about how to think strategically.

Modeling thinking strategies is also called mental modeling. The goal is to share with students the thought process required to obtain correct answers. The teacher begins modeling exclusively, thinking aloud, but gradually releases the responsibility of learning to the student until he/she has a thorough understanding of the skill. At that point the student becomes an independent learner and user of the skill.

The popular question/answer/relationship (QAR) strategy is included in the pamphlet as a plan for correctly generating answers to comprehension questions. The procedure requires the answering student to decide if the answer to the question is a

right there question (answer is stated in a single sentence in the book), a think and search question (answer is stated in the story in more than one sentence, requiring the student to search for the answer), an on my own question (answer is only found in the reader's background knowledge), or a writer and me question (answer is found in the readers background knowledge, but could not be determined without first reading the story). Students should be made aware of these four types of questions so that when faced with a reading comprehension question, students will know where to find the answer.

According to the pamphlet, graphic organizers can be effective reading comprehension activities when used as frameworks for readiness, assimilation, and follow up exercises. Organizers can show relationships, depict a concept, and provide a way of clarifying meaning, among other uses. In some forms, they can provide visual references for discussions.

Duffy, Roehler, and Herrmann (1988) explained the teaching technique called mental modeling that makes students aware of the flexible reasoning processes involved in strategic reading. Modeling is defined as a physical demonstration of how to do a task. To model cognitive activities, teachers make their reasoning

visible. This is called "mental modeling." To model a mental process the teacher literally thinks aloud, explaining how he/she reasoned out the answer or reasoned through a process. Teachers practicing mental modeling must keep two major goals in mind; eventually being able to transfer the metacognitive control from themselves to the student, and modeling mental processes as opposed to procedural steps.

Generally, reading teachers ask inferential questions to assess the students' level of understanding. If students are to assume metacognitve control, they must be made aware of the reasoning processes expert readers use to answer such questions so they can independently direct personal reasoning processes in future reading situations. This awareness can be gained through mental modeling.

For mental modeling to be successful, students must be closely monitored while given an opportunity to verbalize their own understandings about the reading selection. Then, based on the student's answers, the teacher can provide additional information to bring the student to the correct answer.

Poindexter and Prescott (1986) explained a metacognitive strategy for answering comprehension questions. The authors contended that students need to

be taught a specific strategy to help them answer inferential questions if they are to gain independence in understanding what they read.

The strategy they espoused provided a step-by-step series of directions for students to follow in determining how best to find the answer to a comprehension question. Some answers to questions are directly stated in the text and can be found by reading the lines (literal comprehension/textually explicit), other answers to questions are indirectly stated in the text and can be found by reading between the lines (inferential comprehension/ textually implicit). Some answers are not stated in the text at all and can only be answered by reading beyond the lines (inferential comprehension/scriptally implicit).

When a question is asked, the student should follow a series of steps to determine the answer. Step one involves choosing some key words from the question and trying to find those same words in the story, reading the sentences where those words are found and determining if the answer is there. If not, students are advised to go to step two. In step two the student changes the question into a statement and leaves a blank at the end that invites an answer to complete it. The student must then go back to the story and locate

the section that might contain that information, and reread that section to see if there are words there that might answer the question if put in the blank. If the students can not find the answer, they are to proceed to step three. In step three the student puts the words "I think" in front of the statement created in step two. The student must then think about the whole story and also what he/she already knows about the world. Students are taught to put the above thoughts together and try to fill in the blank. If the student can fill in the blank after step three, it means that there is probably no one right answer to the question, but the student must be able to support his/her answer.

For students to be able to use this strategy independently, they must be trained through teacher modeling of behaviors and thinking processes. This training must include frequent practice and be conducted under careful and supportive guidance.

This strategy was researched in five schools in a large urban area. Four hundred students from grades four, five, and six participated in the three month study. All students were pretested and posttested with the experimental groups undergoing strategy training. After the three months of treatment, the students who

students who used the strategy answered more comprehension questions correctly, reflecting positive differences in all three categories of questions.

Research conducted by Winne, Graham, and Prock (1993) suggested the huge role that explanatory feedback can play in helping improve poor readers' text-based inferencing skills. The authors contend that the ability to draw inferences is a cornerstone of reading competence. Text-based inferences are defined as inferences that depend primarily on procedural knowledge and less on prior world knowledge. The use of text-based inferencing is an important part of learning new information in a content area which does not link with a reader's prior knowledge. The researchers investigated whether low-achieving readers' ability to draw text-based inferences could be improved by training students to pay attention to the textual dimensions of reading passages to create text-based inferences. Two kinds of feedback were contrasted in this project along with direct explanations about a method for making accurate text-based inferences.

Based on previous experiments and observations, the authors believed that there is adequate evidence that feedback is a key element in effective instruction. The authors listed the following general

principles about effective feedback:

> Feedback following correct answers should be simply acknowledged for their correctness; feedback following an incorrect answer should be immediate, provide the correct answer, and explain why that answer is correct (Winne, Graham, and Prock, 1993, p.55).

The subjects in this research study were 24 low-achieving readers preparing to enter the fourth, fifth, or sixth grade who were enrolled in a five-week summer tutoring program. Each student received nine tutoring sessions. In each session the tutor read aloud one prose passage containing approximately 175 words, while the tutee followed along on a copy of the passage. Then the passage was removed and the tutor asked six comprehension questions and recorded the responses on a coding sheet. The passage was then given back to the tutee and the tutor repeated each inference question and the tutee's response. After repeating the first question and response, the tutee underlined the phrases in the passage that helped him/her figure out the answer. The tutor then checked and recorded the type of information underlined. The tutor then repeated the inference question and the correct answer. If the tutee had answered correctly, the tutor praised the tutee. If the tutee had answered incorrectly or incompletely, the tutor indicated that and used a

colored pen to underline the correct information necessary to infer the correct answer. The tutor used the terminology "rule" and "critical fact" to distinguish between the two different kinds of information needed to create an inference. The researchers explained that

> The rule is information that provides grounds for inducing a probable event. The second kind of information is a critical fact that constrains application of the rule so that one particular generalization can be inferred (Winne, Graham, & Prock, 1993, p.54)

The control group, the tutees receiving inductive feedback, repeated the above procedure for each of the six questions accompanying each reading selection. All the correct answers were provided to the tutees in the form of tutor underlining, but the tutees had to induce the process for making inferences.

The treatment group, the tutees receiving explicit feedback, also followed the above procedure for each of the six questions accompanying each selection. The tutors then extended the feedback to explaining and demonstrating how to figure out the rule and critical fact in the selection, and how they work together to lead the reader to the correct inference. The tutor also explained the role that irrelevant and distracting information played in making the inference.

The results of the research suggested that a multifaceted feedback treatment has positive effects. The specific features of this study's feedback treatment were: it provided clear indications of correctness, it reinforced correct information by indicating it orally and visually (underlining), and it reminded students why such information is important. The results of this study indicated that the tutees in the treatment group, who received explicit feedback, were able to answer more inference questions correctly than tutees in the control group.

Anderson, Mason, and Wilkinson (1990) conducted a microanalysis of small-group reading lessons to determine if putting an emphasis on meaning rather than accurate oral reading resulted in better comprehension and if the turn-taker gets more from the lesson at that time. Four classes of third graders, one split class of second and third graders, and one split class of third and fourth graders attending two different schools were the subjects for this study. Each class was divided into three ability groups. All targeted classes were given the same four stories to be used in this study. Teachers were given a script to follow to introduce each story. The reading groups met Monday, Tuesday, Thursday, and Friday for instruction and read

one complete story per day. Teachers all followed a predetermined schedule of lessons emphasizing either story meaning or oral reading precision. The teacher recorded the name of the turn-taker reading on each page of the story. After each reading group the students went back to their seats to complete related independent work. At the end of the week, the independent seat work was assessed and data were collected and analyzed. Since the teachers knew who was the turn-taker on each page of the stories, the seat work was then analyzed for retention and understanding of the stories based on turn-taker, meaning emphasis and surface emphasis. In the final analysis, turn-takers learned and remembered more material than non-turn-takers. Also, when meaning was emphasized, the students remembered more about the stories, rated the stories as more interesting, and made fewer oral reading errors as compared with emphasis on oral reading precision.

Labbo and Teale (1990) researched the effects of using cross-age tutoring to help poor readers. They wanted to determine if low-achieving fifth graders could improve their own reading fluency and comprehension through sharing storybooks with kindergarten students. Twenty students in fifth grade

identified as below-average readers were randomly divided into three groups (cross-age Reading Group, cross-age Art Group, and Basal Reading Group). For 32 sessions of 15 to 20 minutes, each member of the cross-age Reading Group and Art Group were paired with a kindergarten student in the kindergarten classroom, while the Basal Reading Group stayed with their teacher and received the regular basal reading instruction. All 20 targeted students were given pretests to determine reading achievement, self-concept, reading attitudes, and use of reading strategies. The Art Group served to determine if any effects of the cross-age reading program could be due merely to interaction with the younger students. They were given the assignment of completing one art project each visit. The Basal Reading Group served as the control group. The cross-age Reading Group received special instructions on how to share the storybooks effectively, was given ample time to practice reading the story fluently, and participated in post-reading collaboration with the teacher. At the end of the 32 sessions, the targeted students were posttested, resulting in the cross-age Reading Group scoring significantly higher than the other two groups on three out of four of the posttests. The one test not showing

a significant difference did show a significant difference between pretest scores and posttest scores for the cross-age Reading Group. Labbo and Teale concluded that cross-age reading can help improve the reading of poor readers in upper elementary grades.

Research conducted by Leland and Fitzpatrick (1993) suggested that students' attitudes toward literacy can be improved through cross-age interaction. One class of sixth graders classified as average or below average readers was paired with a kindergarten class for weekly sessions. The students were randomly paired and were flexible so that the project would not be affected due to student absences. The sixth graders' attitudes toward reading were assessed prior to beginning the project through a teacher developed reading attitude inventory.

The sixth graders were prepared for this project by first being informed of the goals of the sessions. The students were told that the most important goal was to make the sessions pleasurable for all involved. The sixth graders were then trained in ways of holding the attention of the younger students. Techniques such as how to refocus attention on the book or illustration by pointing or asking questions about the story, and reading expressively were discussed and modeled.

The sixth graders' preparation then turned toward literary awareness. The students worked in pairs reading easy books and then completing story maps charting the action of the story. A story map is a chart that serves as a visual framework of the story that helps the reader organize and store information about what was read. Before each cross-age session, the sixth graders selected the stories to be read and practiced reading and story mapping.

For the first few sessions, the six graders and their kindergarten partners only shared stories and discussed the texts and illustrations. Then, after several weeks, the older students asked if they could do a book-related activity with their partners. The tutors decided to introduce their younger partners to a simple form of story mapping, first discussing the story, then drawing pictures with captions describing the beginning, middle, and end of the story.

Eventually the tutors shared a more complex story map which included characters, setting, problem, attempts to solve the problem, and the resolution. The kindergarten students drew pictures for each portion of the story map and the tutor, through discussion and questioning elicited the text for the story map. The tutor wrote as the kindergarten student dictated.

In the third month of the project, the tutors and their kindergarten partners wrote original stories based on the common theme of "fear." The partners worked together first discussing what their original book might be about, who would be in it, where would the story take place and creating a story map of their original stories. The partners then wrote the first draft of the stories with the kindergartner dictating and the sixth grader serving as facilitator and recorder. When the drafts were completed, the sixth graders typed them. The teacher then modeled correct writing conference procedures while editing and revising the stories.

Each subsequent cross-age tutoring session began with sharing a previously selected book, then reading the coauthored drafts and working on the revisions and editing. After the text was completed the partners worked together on the illustrations. Finally, the title pages were prepared and an "About the Authors" page was created which contained biographical information about both authors.

At the end of the three month project, the reading attitude inventory was readministered to the sixth grade students. There was a significant positive difference between the student responses before and

after the project. When asked about the best part of the project, one sixth grader replied, "my partner made me feel like a really good reader." Other positive results were an increase in pleasure reading and both kindergartners and sixth graders reported having more enthusiasm for writing.

Thomas (1993) wrote a digest which provides information on tutoring programs in general, and includes examples of successful programs recognized by the National Diffusion Network. According to Thomas (1993, p.1), "cross-age and peer tutoring are methods of instruction in which learners help each other and in turn learn by teaching." He contends that tutoring programs can be structured so that both the tutor and tutee benefit from the experience.

Hedin (1987), promoted one-on-one tutoring as an exceptionally effective teaching method. Besides helping the tutored students learn, it can also reduce student passivity toward learning. When cross-age tutoring is used in a school setting, it can reduce the isolation of subgroups within schools. Hedin (1987) argued that since both the tutee and tutor can achieve academic and personal growth through peer and cross-age tutoring, it should be an integral part of every student's educational experience.

By acting as the teacher in a cross-age tutoring program, the tutor benefits in several ways. The tutor benefits because his/her sense of competency and adequacy is elevated by assuming the role of teacher. The tutor's self-esteem is elevated as he/she receives respect and admiration from both the adults involved and the younger student being tutored. There is a cognitive-developmental theory suggesting that through doing the complex job of teaching others, tutors experience two major changes, increased empathy and higher levels of thinking. When tutors teach younger students, it allows the older student to review more elementary material while helping the younger student. The tutor assimilates and retains the information he/she is teaching better because it is used during interaction with others. Hedin (1987) further suggested that through being responsible for another's learning, tutors may even become interested in the nature of education and how learning occurs and may become better managers of their own learning.

The tutee is benefited by improved academic performance. He/she experiences individualized instruction where correct responses are monitored and immediately rewarded. In cross-age tutoring programs tutees can also benefit because they are more able to

accept help from someone closer in age than their adult teacher. Hedin (1987) suggested that by adding peer or cross-age tutoring to an elementary or secondary school's program it could significantly expand the school's capability to promote student academic and interpersonal growth.

Solution Strategy

The research discussed above establishes that comprehension can be taught, that the student taking an active turn derives the most benefit of that instruction, and that cross-age tutoring helps the older student as well as the younger. Additionally, feedback correctly given is a key element in effective instruction, students' attitudes toward reading can improve through cross-age tutoring programs, and the older student can gain self-esteem and confidence through tutoring less capable students. This author combined these ideas into a cross-age tutoring program in which each child shared turn-taking with only one other student, and the older student helped the younger student develop metacognitive strategies to improve reading comprehension.

According to the research of Haller, Child, and Walberg (1988), reading comprehension can be taught

through instruction of metacognitive strategies. Using this information, this author proposed to implement a program whereby targeted fifth graders improved their reading abilities by explaining and practicing metacognitive strategies to second graders. In theory, the fifth graders would be more motivated to learn the strategies if they knew they would be helping develop them in younger students.

According to "New Directions in Reading Instruction" (1988), a pamphlet by the International Reading Association (IRA), strategic teachers emphasize providing assistance during reading instruction instead of just assessing students' knowledge. One-on-one tutoring allowed for direct assistance during the entire reading session. The pamphlet depicted strategic teachers as emphasizing "knowing what you know," making cognitive skills tangible, and providing advice about how to think strategically. This author's cross-age tutoring project was designed to have the tutor explain the process by which a reading inference was determined (mental modeling), resulting in the tutee "knowing how you know." The IRA pamphlet also presented the popular Question/Answer/Relationship (QAR) technique as an effective comprehension strategy. The one-on-one tutoring program designed by this author

provided the opportunity for the tutor to give immediate feedback about the type of question asked, so that the tutee could then determine where and how to find the answer.

Duffy, Roehler, and Herrmann (1988) stressed that for students to assume metacognitive control over a mental reasoning process such as reading comprehension, they must be made aware of the reasoning processes expert readers use to understand what they read. Once aware of these processes, they can direct their own reasoning processes in future reading situations. This author's cross-age tutoring program stressed relinquishing metacognitive control to students.

Poindexter and Prescott (1986) discussed a strategy for drawing inferences from the text very similar to the QAR strategy. That strategy was an integral component of this author's cross-age tutoring project. The tutors determined the type of question being asked and how best to find the answer, then helped the tutees find the same information. The tutees' ability to determine the type of question asked, and the ability to orally explain how an answer to a question was determined, was coded on the researcher developed Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92).

Winne, Graham, and Prock (1993) delineated a process whereby students can draw text-based inferences. Since text-based inferences do not depend on prior knowledge, this author felt that this would be an important skill for this targeted school's population to master. Also, the type of explicit feedback required to guide students through the process can best be accomplished through a one-on-one tutoring situation such as that developed by the author.

Anderson, Wilkinson and Mason (1990) suggested that the student actively taking a turn gets more from the lesson. This author realized that in a normal classroom setting it would be impossible for each student to be a turn-taker many times in any one lesson. However, by pairing each student with only one other, the opportunities for active turn-taking would be greatly increased. This researcher included this method of student pairing into the development and implementation of a cross-age tutoring program.

Labbo and Teale (1990) found that the reading abilities of upper elementary students can be significantly improved by using older students as tutors for younger students. This author developed a cross-age tutoring program based on the belief that by pairing targeted fifth grade students with second grade

students to practice reading comprehension strategies, the fifth grade targeted students would derive significant benefits from the interaction.

Leland and Fitzpatrick (1993) pointed out the effectiveness of cross-age tutoring programs in improving attitudes toward reading. Also, the use of story mapping led to a better understanding of the elements of the stories read. After the students worked with simple story maps, they progressed to more complex maps with ease. This author planned to use story mapping as an integral component of this cross-age tutoring program.

Based on the above research, this author designed a cross-age tutoring program whereby targeted fifth grade students tutored second grade students on reading comprehension and reading fluency. It was hoped that this interaction would improve both the second grade and the fifth grade students' reading abilities, critical thinking skills as related to reading comprehension strategies, and attitudes toward reading.

CHAPTER III

Method

The following is a detailed plan used to effectively implement this cross-age tutoring project. The cooperation of the administration, teachers, parents/guardians, and students was critical to the success of this project. The researcher was solely responsible for teacher/student training and dissemination of information regarding this project.

The researcher acquired the following permissions in order to execute this proposal: parents/guardians of participating students; school-site and county level administrators; and Silver Burdett, publishers of the basal reader used in this project. Parental/guardian permission also included permission to include results in the final report.

Prior to beginning the cross-age tutoring program, the researcher met with the teachers who had students involved in this project to explain the objectives, activities, and logistics of this cross-age tutoring program. A schedule was set at that time.

Some materials were developed by the researcher for use throughout this project. The Collier Reading Attitude Inventory (CRAI) (Appendix E:96) was used to measure each targeted student's attitude toward reading before and then after the cross-age tutoring project.

The author also designed the Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92). The RCAC is a form on which the tutor recorded the tutees' responses to the guided reading comprehension questions. Several RCAC's (one for each guided reading question) were completed by the tutor as the tutee read the story aloud. While the tutee read, the tutor asked the guided reading questions suggested in the teacher's edition of the basal reader and recorded the tutees' answers and level of awareness of "how" the answer was determined on the corresponding RCAC. The tutee earned points based not only on being able to answer the question posed, but also being able to determine what type of question was asked, and to adequately explain to the tutor how the answer was determined.

Another researcher-developed instrument used was the Context Clues Chart (CCC) (Appendix D:94). Prior to each tutoring session, the tutors prepared the CCC's by listing the vocabulary words and other difficult words found on each page of the basal story to be read.

As the tutee read the story, the tutor asked the meaning of each word previously recorded on the CCC. Points were awarded if the tutee knew the meaning of the word based on prior knowledge, or inferred the meaning by using context clues.

The researcher obtained baseline data before beginning the cross-age tutoring sessions. To establish the baseline data, the researcher used several different instruments. The researcher administered the Kaufman Test of Educational Achievement (K-TEA), and the Collier Reading Attitude Inventory (CRAI) (Appendix E:96) to all eight targeted students. The Silver Burdett & Ginn Level Four Placement Test was administered to the second grade targeted students. The Silver Burdett & Ginn Level 11 Placement Test was administered to the fifth grade targeted students. The Silver Burdett & Ginn Level 11 Skills Practice page 174 was administered to the fifth grade targeted students to measure the students' ability to independently derive word meaning from the use of context clues.

The targeted fifth grade students met as a group and were introduced to this cross-age tutoring program as a way of helping the second grade students become better readers and comprehenders while improving their

own reading comprehension skills. Permissions to be included in the project and a commitment to complete the project was obtained from each targeted fifth grade student. The tutors were then each assigned a Tutor's Binder which was to be used for recording information during tutoring sessions.

The researcher conducted a training session with all four targeted fifth grade students. The researcher assumed the role of the tutor with the targeted fifth grade students being the tutees. Using the Silver Burdett & Ginn second grade reading book, Garden Gates, the researcher demonstrated the correct procedures to be followed in this project. As the fifth grade students read orally, the researcher modeled giving corrective feedback, mental modeling, reinforcing, using context clues to determine the meaning of unknown words, recording the necessary information on the Context Clues Chart (CCC) (Appendix D:94), asking the suggested inferential guided reading questions at the end of each page, and recording the information on the corresponding Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92).

The researcher then met with each targeted second grade student individually to explain the tutoring project, answer any questions, and acquire the

students' permission to be included in the project. At this meeting, the researcher also obtained some of the needed baseline data.

After the initial introduction to the program was completed, and the baseline data had been obtained, this cross-age tutoring project proceeded on a five day program cycle. On days one and two of each program cycle, the targeted fifth grade students (tutors) met with the researcher to receive instructions on the reading comprehension strategies to be used in that cross-age tutoring program cycle. The tutors then worked cooperatively to prepare materials and practice strategies for the following two days of tutoring sessions. On days three and four of the program cycle, the eight targeted students met in pairs for cross-age tutoring sessions. The researcher met with all the targeted students before each tutoring session to emphasize the importance of the session. On day five, the researcher met with the fifth grade tutors for a post-session collaboration. At this meeting the researcher and fifth grade tutors discussed successes, problems, and reviewed comments made in the Tutor's Binders.

Each five day program cycle included eight steps. During step number one, the researcher met with the

four targeted fifth grade students to prepare for the tutoring sessions. The Reading Comprehension Awareness Checklists (Appendix C:92) and Context Clues Charts (Appendix D:94) were distributed along with the Silver Burdett & Ginn teacher's edition of the World of Reading second grade text, Garden Gates.

In step number two, the four targeted fifth grade students worked cooperatively reading the story for that program cycle and preparing the Reading Awareness Checklists (RCAC) (Appendix C:92) and Context Clues Charts (CCC) (Appendix D:94). After reviewing the use of the RCAC, the researcher and fifth grade targeted students used the Silver Burdett & Ginn teacher's editions to supply the guided reading questions to be used for that program cycle's story. Each tutor prepared one RCAC to correspond with each guided reading question in the story by writing the question and student page number on the top of each RCAC.

The researcher reviewed the use of the CCC and helped the tutors prepare the CCC's for the subsequent tutoring sessions. To prepare the CCC's the targeted fifth grade students and researcher recorded the second grade vocabulary words present on each page of the story, onto the corresponding CCC (Appendix D:94) and discussed the context clues available on the page to

help determine the meaning of each word. Tutors looked for other difficult words in the story, recorded them on the appropriate CCC (Appendix D:94) and found context clues in the story that would help a student infer the meaning of the word.

During step number three, the fifth grade targeted students worked together discussing each guided reading question to determine its type (right there, think and search, or in my head). The tutors then recorded the type of questions asked on the corresponding Reading Comprehension Awareness Checklists (Appendix C:92).

In step number four, the researcher and fifth grade targeted students met and shared results of step number three. At this meeting, criteria were established for determining when an answer to each guided reading question had been adequately explained, enabling the tutors to accurately assess the tutees' responses and properly record the results on the RCAC's (Appendix C:92). The researcher and targeted fifth grade students discussed effective use of corrective feedback, mental modeling, and reinforcement which were to be used during the tutoring sessions.

During step number five, the researcher and the fifth grade targeted students created a story map (Appendix F:98) for the story just read for use on day

four of the program cycle. This step was eliminated in most program cycles due to time constraints.

During step number six, the targeted fifth grade students and targeted second grade students met in cross-age tutoring pairs. The second grade students read the story for that program cycle orally, while the fifth grade tutor gave corrective feedback, and reinforcement. As the tutee read, the tutor also asked context clue questions, recorded results on a CCC (Appendix D:94), asked guided reading questions and recorded responses on a RCAC (Appendix C:92). The tutor lead the second grade student through reading comprehension strategies discussed in step two, and recorded any comments that the tutor wanted to share with the researcher and other tutors on day five of the program cycle.

During step number seven, the fifth grade targeted students made comments in the Tutor's Binders. The comments included successes, questions, problems, and thoughts about the session. To allow the tutors time to thoughtfully complete this step of the project, the researcher assigned other students to escort the second graders back to class.

In step number eight, the researcher met with all fifth grade targeted students to discuss tutoring

successes, problems, and comments. The students shared comments previously recorded in tutoring sessions. The meetings were conducted as Plus/Delta Meetings. Comments were recorded on a Plus/Delta Meeting Form (Appendix H:102) recording positive comments (pluses) on one half of the form and areas of concern and in need of change (deltas) on the other side. The deltas were discussed and solutions were suggested using the rules of brainstorming designed to produce the greatest number of suggestions. The tutors were to be nonjudgemental when others suggested solutions. After suggestions were offered, they were discussed and agreed upon. In the subsequent post-session collaboration, the deltas were again discussed to assess the success of the implemented solutions. The tutors enjoyed these meetings, and many times a delta from one week became a plus the next. Through these Plus/Delta Meetings, the tutors seemed to feel a sense of power to positively impact the project. These meetings also became a valuable lesson in problem solving, as the tutors experienced the effect of brainstorming possible solutions to problems.

Twelve full program cycles were planned. The program cycles began in week one and proceeded continuously through week 12.

While proceeding through the 12 program cycles, due to time constraints, several planned objectives were not able to be addressed. First, the researcher was unable to complete the final Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92) with the fifth grade tutors. Second, this researcher was unable to administer the Silver Burdett & Ginn Level 11 Skills Practice page 174. Finally, the Context Clues Chart (CCC) (Appendix D:94) accompanying "A Good Chance" was not completed by the fifth grade tutors. All of the objectives not addressed were post-project assessments not part of the treatment itself, therefore the effectiveness of the treatment was not affected by the unaddressed objectives.

Timeline

Week Number	Activities
One-12	The researcher and students proceeded through the 12 program cycles, steps one through eight, modifying the program activities as needed.
13	The researcher administered posttests and met with targeted students to discuss impressions and feelings about the program's successes and concerns. A celebration was held.

CHAPTER IV

Results

This chapter includes information regarding evaluation methods, instruments, accomplishments, concerns and specific objectives of this cross-age tutoring project. Several methods of evaluation were used. The evaluation methods included were the Kaufman Test of Educational Achievement, the Silver Burdett & Ginn Level Four Placement Test, the Silver Burdett & Ginn Level 11 Placement Test, the Reading Comprehension Awareness Checklist (Appendix C:92), the Context Clues Chart (Appendix D:94), and the Collier Reading Attitude Inventory (Appendix E:96).

The Kaufman Test of Educational Achievement (K-TEA) is a battery of tests used by this targeted school's specific learning disabilities teachers to show gain in educational achievement. The K-TEA has been proven both valid and reliable for use in research studies. The reading comprehension subtest of the K-TEA consisted of paragraphs of varying lengths for the students to read silently or aloud, with one or two

questions following each paragraph. The students were under no time limit to complete each question. The questions assessed both literal and inferential comprehension. Since there was no time limit, some of the students took the opportunity to reread the text before answering the question(s) resulting in higher grade equivalency scores than expected. The tested students responded orally to the questions. Before administering, this researcher had been trained in the administration and scoring of this test. This author administered the K-TEA's reading comprehension subtest to all eight targeted students before the beginning of the cross-age tutoring sessions and after completion of the 12-week project.

The Silver Burdett & Ginn Unit Four Placement Test and the Silver Burdett & Ginn Unit 11 Placement Test were part of the county adopted reading series, Silver Burdett & Ginn World of Reading. This author chose to administer only the reading comprehension portion of the Silver Burdett & Ginn Placement Tests, since that was the focus of this project. The other portions of the tests measured skills not included in the treatment. The reading comprehension portion of the tests consisted of several paragraphs followed by questions that assessed both literal and inferential

comprehension. The author administered the placement tests to the second grade targeted students and the fifth grade targeted students in groups.

The Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92) is an instrument developed by this author to assess the targeted students' awareness and use of the reading comprehension strategy of inference. As the tutee read a story aloud from the reading text, the tutor asked the tutee each guided reading question suggested in the teacher's edition of the text, and coded the tutee's responses to each question on a corresponding RCAC (Appendix C:92). The responses had been assigned a point value on the RCAC, with 10 being the maximum points per question. Points were assigned to the tutee for both being able to infer the answer and for being able to explain "how" the inference was made. The author submitted this instrument to local reading experts for review. Three changes were suggested. One expert suggested that a change be made in the terminology for the type of question asked, from "detail" and "inference" to the more familiar, "right there," "think and search," and "in my head." Another expert suggested that a place be provided on the RCAC (Appendix C:92) for the tutors to copy the guided reading question from the teacher's

edition directly onto the RCAC to avoid mistakes correlating the question with its corresponding RCAC. Another suggestion was to make all the directions on the RCAC in bold type. The suggestions were incorporated into the final edition of this instrument. No validity or reliability figures exist for this instrument at this time.

The Context Clues Checklist (CCC) (Appendix D:94) is an instrument created by this author to measure the targeted students' use of context clues in determining word meaning. Before each tutoring session, the tutor recorded the vocabulary words found on each page of the story onto the CCC (Appendix D:94), and continued to record words with which the tutees encountered difficulty while reading the story aloud. The tutees used context clues to determine the meaning of the words. Five points were awarded for each word the tutee defined, either from prior knowledge or from using context clues. This instrument was submitted to local experts for review. One suggestion was offered, to provide more spaces for unknown words. The suggestion was incorporated into the final edition of the instrument. No validity or reliability figures for this instrument exist at this time.

The Collier Reading Attitude Inventory (CRAI) (Appendix E:96) is an instrument developed by the author to assess the targeted students' general attitude toward reading. The questions on the inventory related to the students' recreational reading. The students responded to each statement on a scale ranging from "very much" to "never." This instrument was submitted to local experts for review. One suggestion was offered, to modify the wording of the responses to ones more familiar to the second grade students. The modification was incorporated into the final edition of the instrument. This author administered the Collier Reading Attutude Inventory (Appendix E:96) individually to the targeted second graders, and in a group to the fifth grade targeted students. No validity or reliability figures for this instrument exist at this time.

The following portion of this final report details each proposed objective and whether or not the objective was met. Also included are the results of posttesting after the 12 week treatment.

The first objective of this 12-week cross-age tutoring project was, that after participating in the project, at least six of the eight targeted students would show a gain of one or more years grade

equivalency on the reading comprehension subtest of the Kaufman Test of Educational Achievement. One of the targeted second grade students was dismissed from the project and two of the remaining seven participants gained one year or more (Table 6:63). This objective was not met.

Table 6

Kaufman Test of Educational Achievement (K-TEA)
Reading Comprehension Subtest

Student	Pretest Grade Equivalency	Posttest Grade Equivalency	Gain Grade Equivalency
Student A	1.2	1.3	.1
Student B	1.6	---	--
Student C	0.5	1.3	.8
Student D	1.0	1.6	.6
Student E	3.3	3.5	.2
Student F	4.5	5.0	.5
Student G	6.4	7.7	1.3
Student H	6.4	8.0	1.6

Another objective of this 12-week project, was that after participating in the entire project, at least three of the four targeted fifth grade students would achieve a score of 75 percent or greater on the Silver Burdett & Ginn Level 11 Placement Test. Three of the four fifth grade participants scored 75 percent or greater with two students improving over 100 percent. This objective was met.

The third objective of this project was that after the implementation of this 12-week project at least three of the four targeted second grade students would achieve a score of 75 percent or greater on the Silver Burdett & Ginn Level Four Placement Test. None of the three remaining participants scored a 75 percent (Table 7:64). This objective was not met.

Table 7

Reading Scores Silver Burdett & Ginn Placement Test Scores

Student	Pretest Percent Correct	Posttest Percent Correct	Gain Percent
Student A	50	50	0
Student B	32	--	--
Student C	0	16	16
Student D	34	50	47
Student E	60	60	0
Student F	27	75	178
Student G	45	93	107
Student H	53	87	64

Another objective of this tutoring project was that after the implementation of this 12-week project, at least three of the four targeted fifth grade students would demonstrate an improved awareness of reading strategies as measured by a score of 85 percent or greater on the Reading Comprehension Awareness Checklist (Appendix C:92) accompanying "A Good Chance," the final fifth grade story used in this project. Due

to time constraints, this objective was not addressed and, therefore, not met.

Another objective addressed in this 12-week cross-age tutoring project was that at least three of the four targeted second grade students would demonstrate an improved awareness of reading strategies as measured by a score of 85 percent or greater on the Reading Comprehension Awareness Checklist (RCAC) (Appendix C:92) accompanying the last story included in this project. The remaining three second grade participants achieved a score of 85 percent or greater on the RCAC. This objective was met. However, since it was necessary for the tutors to help the tutees read and decode the words in the story, the points recorded on the RCAC to some degree also reflected the tutees' listening comprehension.

Another objective of this cross-age tutoring program, was that after the implementation of this 12-week project, at least three of the four targeted fifth grade students would demonstrate an improved awareness of and use of context clues as measured by a score of 85 percent or greater on the Context Clues Chart (Appendix D:94) accompanying "A Good Chance," the final grade five story used in this project. This objective was not addressed and, therefore, was not met.

An additional objective of this 12-week project, was that at least three of the four targeted second grade students would demonstrate an improved use of context clues as measured by a score of 85 percent or greater on the Context Clues Chart (Appendix D:94) accompanying the last second grade story included in this project. Three of the remaining participants scored 85 percent or greater. This objective was met.

Another objective of this 12-week project was that at least three of the four targeted fifth grade students would demonstrate an improved awareness of and use of context clues as measured by a score of 85 percent or greater on the Silver Burdett & Ginn Level 11 Skills Practice page 174. This objective was not addressed and, therefore, was not met.

The final objective of this cross-age tutoring project was that after participating in the 12-week program, at least seven of the eight targeted students would improve their attitude toward reading as measured by a move of one or more increments to the positive on the Collier Reading Attitude Inventory (Appendix E:96). All seven remaining participants improved their attitude toward reading by at least one increment to the positive. Student A demonstrated an improvement on the CRAI by reporting an increase in understanding what

was read. Among the second grade targeted students, Student C's responses on the CRAI described the largest improvement of attitude toward reading. Student C reported an increase of time spent reading at home, talking to friends about stories read, enjoying books, and understanding what was read. Student D reported spending more time talking about stories read. Student E reported reading more at home and discussing stories with family members. Student F also discussed stories at home more often after this project. Among the fifth grade targeted students, Student G reported the most positive attitude changes. After participating in the project, Student G read more at home in the evenings and daytime, talked to family members about stories more often, enjoyed reading more, and noticed an improvement in understanding what was read. Student H reported reading more at home in the daytime, and talking to friends more about stories read. It is no surprise to this researcher that Students C and G showed the most improvement in attitudes toward reading. These students were paired together and Student G was the most dedicated, conscientious, and empathetic of all the tutors. This objective was met.

While all the objectives of this 12 week cross-age tutoring program were not met, this researcher feels

that important gains were made. The tutees definitely improved decoding skills and experienced consistent individual help, an exception to most second grade experiences. The most important gain, in this researcher's mind, was the improved attitude and confidence the tutors expressed to each other, parents, teachers, and this researcher.

The following is an account of major accomplishments and concerns experienced as this cross-age tutoring project progressed. The results of each Plus/Delta meeting are also included in this account.

Pre-project

The targeted students were elated about being in the project. The second graders seemed more excited about the "party" at the end than actually improving reading skills. All students were cooperative during pre-testing. This researcher was concerned about the second graders' lack of decoding skills. It became obvious that the tutors were going to have to read along with the tutees if any comprehension was going to take place. This researcher was disappointed, but felt the project would help these most needy students with decoding as well as developing an awareness of reading comprehension strategies that

would be useful. In light of poor decoding skills, the second grade targeted students' expected improvement in reading comprehension on the independent posttests was questionable.

Week One

The first week was generally successful. The tutors followed the directions and conscientiously completed all eight steps of this program cycle. The tutors assumed the responsibility of escorting the tutees from the second grade wing to the designated tutoring location.

During the Plus/Delta Meeting on day five, the tutors reported that the sessions were enjoyable, but reported several concerns. The tutees could not read fluently enough to grasp the flow of the story. Some of the tutees were distracted by the environmental noise and activity. Some tutees were distracted by the incentive stickers placed in the front of the Tutor's Binders. Student A seemed nervous and distrustful, Student C was very timid, Student D was easily distracted and showed lack of confidence. After brainstorming solutions to the problems, it was decided that the tutees were to be placed with backs to distractions, the incentive stickers were placed in the

back of the Tutor's Binders out of sight, and Student A Student C and Student D's tutors would have to be extra sensitive.

Week Two

The program cycle progressed as planned. All participants were still enthusiastic about the project. The tutors reported several pluses in the week's post-session collaboration. The tutees were less distracted by surrounding activities and stickers, and the shy students were feeling more comfortable with the tutors. One concern shared by all tutors was the lack of decoding skills of the tutees. Another concern centered around interpersonal relationships between the tutors. This concern was discussed and resolved together.

Week Three

Unfortunately, Student B became a behavior problem this week. The other seven participants showed continued interest. The only concerns reported in the post-session collaboration centered around Student B, and the slow reading pace of the tutees. The tutors decided this researcher should speak with Student B about the unacceptable behavior. There were many pluses reported. Student C was focusing on the story

more than before, Student A was feeling more comfortable with the assigned tutor (which made the tutor feel very good), Student C was able to decode more words than before.

Week Four

Student B behaved better this week, but still presented a slight problem to the assigned tutor. All participants were still enthusiastic about the project and seemed to be feeling some success. The post-session collaboration yielded several pluses. Student C was more interested in the story because decoding was faster. Distractions in general were no longer a problem. Student A was decoding better, and was even more at ease with the tutor. Student D was showing more confidence. The concerns centered around Student B's behavior.

Week Five

This researcher was so proud of the tutors. Due to a teacher workshop, this researcher was absent from school on a day slated for a tutoring session. The tutors conducted the session independently and all went smoothly as reported by the tutors and teachers.

Student G was observed exhibiting great maturity and conscientiousness when dealing with her tutee this

week. Several pluses were mentioned in the post-session collaboration. Student D continued to improve in decoding skills although still very slow, and Student D's tutor, Student H, reported that when Student D was encouraged, reading improved. Student A was becoming less easily distracted. Tutors reported using skills taught to the tutees when doing the Stanford Achievement Test. There were three concerns expressed in post-session collaboration. Student C still didn't read with expression but when the tutor helped by reading with expression along with Student C, retention of material was increased. The teacher's editions were beginning to fall apart. Student B's behavior was unacceptable again. Brainstorming resulted in the following plans: dismiss Student B from the program, tutors would be more careful with the teacher's editions, and Student C's tutor should continue to read along with Student C at least part of the time to give Student C a model to follow. Several other tutors decided to try that also.

The tutors were showing great differences in their commitment to the project. Student E enjoyed getting out of class to participate, but wasn't intensely interested in helping another student. Student F enjoyed the feeling of being special and helping this

researcher, but was easily distracted and didn't always focus on the tutee. Student G was highly committed to the project and extremely interested in her tutee. Student G genuinely wanted to help and seemed to possess great insights into the learning process, motivational techniques, and children in general. Student H was the wild one, who loved getting out of class and being a part of something so special. Student H was inconsistent in his commitment to the project, but seemed to be interested in his tutee's progress. It is evident that this project has boosted Student H's self-esteem.

Week Six

The tutors and tutees were highly distracted by school-wide events. Schedules were disrupted and the sessions did not seem to yield the positive results of past weeks. Post-session collaboration centered around Student E's absences for that week.

Week Seven

Things were back to normal except for Student E's continued absences due to family problems. Student E's absences did not affect a tutee since Student B had been dismissed during week six. This researcher was thrilled to overhear the tutors discussing with

confidence and conviction the type of guided reading questions asked. Student G's natural teaching ability and commitment to the project continued to amaze this researcher. Post-session collaboration yielded no concerns and vague pluses, but tutors were still encouraged by the improvements in the tutees.

Week Eight

Student E returned to school so we invited another second grader to come for extra reading help. Student E could still receive the benefits of tutoring even if the tutee was not an official participant. The tutors reported having a good week with no major concerns or pluses. Perhaps the tutors were beginning to feel the end of the year pressures. This researcher spoke with Student C's mother who reported that Student C was reading more at home. This news was a great boost to this weary researcher. This news was reported in the post-session collaboration.

Week Nine

Things picked up this week. In post-session collaboration, it was reported that Student D was becoming distracted again and losing interest in the project. Student D's assigned tutor and this researcher spoke with Student D and voiced concerns

about the lack of interest shown. Student C continued to improve in decoding encouraging the assigned tutor.

Week 10

All the fifth grade tutors went on a field trip so schedules were disorganized again. All participants seemed happy this week and interested in the project. Tutors voiced concerns about the slow progress shown by the tutees. Even though the tutees had made progress, they were still decoding so poorly that comprehension was difficult unless the tutor read along with the tutee and then asked the guided reading questions at the end of the page. The tutors were concerned that significant improvement had not been made.

Week 11

The tutors worked independently. This researcher listened in, but little input was needed. The tutors knew all the routines and took pride in doing it all independently. The tutors felt improvements had been made in the tutors' reading, allowing better comprehension at the fifth grade reading level. This feeling of accomplishment contributed to a rise in confidence in the tutors' own reading abilities. This was probably a new feeling for the tutors, who had always been below grade level readers. The tutors also

reported using what they had learned in other classes. This is what this researcher had hoped would happen.

Week 12

The tutors and tutees enjoyed this last week of the program. Sessions were conducted as usual including the post-session collaboration. The tutors reported both pluses and concerns. The tutors were unsure about the progress that had been made in the tutees' reading, but felt some important progress had been made. The tutors all reported enjoying the project and suggested it be continued with different students next year.

To culminate this project, all eight targeted students were posttested using the Collier Reading Attitude Inventory (CRAI) (Appendix E:96), and the Kaufman Test of Educational Achievement (K-TEA). The Reading Comprehension Awareness Checklists (RCAC) (Appendix C:92) and Context Clues Charts (CCC) (Appendix D:94) corresponding to the final story in the second grade Silver Burdett & Ginn Basal Reading book were completed. The Silver Burdett & Ginn Level Four Placement Test was administered to the four targeted second grade students. The Silver Burdett & Ginn Level 11 Placement Test was administered to the four targeted

fifth grade students. Each of the seven remaining targeted students was then confidentially interviewed by the researcher regarding successes and concerns about the program.

During the post treatment interviews, the tutors and tutees all reported enjoying the program and partners. Also, each participant felt a sense of personal reading improvement as a result of participation in the 12-week program and hoped this program would continue next year.

The following are excerpts from the post-project interviews with each participant. Student A said, "I liked it. It was fun. I can read better now. I can understand better what I read in class."

Student C remarked, "Yes, I liked it. It helped me a lot. It helped me learn how to read. My tutor helped sound out the words. I am still having trouble remembering, though."

Student D said, "I liked it. I liked reading. I liked my tutor. The tutor helped me read better. I wish more kids could come."

Student E remarked, "I think the program should continue with second grade. It helped me by when I taught the younger kids, it helped me read more and better. I needed to read more. We needed more time."

Student F said, "I liked the whole thing. I liked helping the little kids. We really needed more time with you and the second graders."

Student G remarked, "I think the program helped me to read better. I think it should continue with the second graders next year. The only bad thing was there wasn't enough time."

Student H said, "It helped me read better by teaching the other kids. I think it should continue but maybe with the third graders. The third graders would be more ready to go out of their classroom. I liked it."

When asked to respond in writing to the question, "What was the best part of the project?" the fifth grade tutors' responded as follows (responses are unedited). Student E wrote, "The best part was reading with the childern." Student F wrote, "The party and reading with the kids." Student G responded, "Teaching the other kids to read." Student H wrote, "It helped everyone who partisapated."

In the final analysis, the results of this cross-age tutoring project strongly supported the research on which it was based. As Hedin (1987) suggested cross-age tutoring reduced student passivity toward learning, the tutors' self-esteem and sense of competency and

adequacy were elevated by assuming the role of teacher, and through teaching others, the tutors displayed higher levels of thinking and empathy. This higher level thinking was evidenced in this cross-age tutoring program when the tutors had to discuss how to explain answers to the second grade guided reading questions, thereby helping the tutors learn the process of extracting information from the text. The tutors showed empathy when expressing the desire to help, and wishing someone had offered such individual help when the tutors were in second grade.

In this cross-age tutoring project, the tutors practiced mental modeling as suggested by Duffy, Roehler, and Herrman (1988). By practicing mental modeling with each other and then again with the tutees, the tutors were forced to become aware of the thinking processes involved in discovering an answer. The tutors must have internalized this information and used it when working independently, as evidenced by the gains on the posttests.

The results of this cross-age tutoring project also supported the findings of Labbo and Teale (1990), who found that the reading abilities of upper elementary students can be improved by using older students as tutors for younger students. This

researcher was amazed by the vast improvement in three of the four tutors' reading ability.

This researcher was disappointed, but not surprised, by the lack of improvement in the second grade tutees' reading comprehension as evidenced by the posttest scores (Tables 6:63 and 7:64). As discussed above, these students were severely low in decoding skills which impeded the progress and pace of the reading comprehension instruction. Also, these students received a total of only 12 hours of tutoring throughout this project.

On the other hand, this researcher was elated with the reading improvements exhibited by the fifth grade tutors. Three out of four gained over one year's growth on the reading comprehension portion of the 1995 Stanford Achievement Test with one tutor showing a 3.4 year gain. Gains were also shown as evidenced by the Kaufman Test of Educational Achievement pretest and posttest scores (Table 6:63), and the pretest and posttest Silver Burdett & Ginn Reading Placement Test scores (Table 7:64).

Regardless of the posttest scores and the number of objectives met and not met, this cross-age tutoring project was a success. The fifth grade targeted students became highly aware of some of the strategies

good readers use and, assuming the role of experts, happily shared this information with the second grade tutees. The post-project interviews with the participants, teachers, and parents highlighted the impact the project had on the tutors and tutees. The reported boost to the students' self-confidence and self-esteem, the feelings of empathy and self-satisfaction can best be measured by the smiling faces, not by posttest scores.

CHAPTER V

Recommendations

After completion of the 12-week cross-age tutoring project, the project results were shared with the site administrators, teachers at the targeted school site involved with language arts classes, and any other interested personnel through a final report. The parents/guardians of each targeted student were given a final progress report.

This researcher feels greater gains could have been attained through several modifications. One of the biggest problems reported in the Plus/Delta meetings and the post-project interviews, was the lack of available time for instructional and tutorial sessions. Since this researcher and the fifth grade tutors did not work with fifth grade reading materials, the fifth grade students could not be removed from daily scheduled reading classes. Therefore, the instructional and tutoring sessions typically lasted less than 30 minutes. It is interesting to note that during the project, the researcher and fifth grade

tutors never worked in the fifth grade reading level materials, yet gains were shown at the fifth grade level through posttest scores. This fact leads this researcher to suggest that in order to expand the amount of instructional and tutoring time available, a whole class of fourth or fifth grade students could be involved in a cross-age tutoring program, using lower grade level materials, and the time spent tutoring could count as regularly scheduled reading class time for both grade levels. This could only be possible if the whole class was involved in the project.

Another problem affecting the outcome of this project was the time of year in which it was implemented. Typically, towards the end of the school year, there are many unavoidable distractions. For maximum effectiveness, this researcher suggests implementing the program earlier in the school year.

Finally, if this program were expanded, it would be necessary to have the selected guided reading questions from the teacher's editions preprinted on the Reading Comprehension Awareness Checklists (RCAC) (Appendix C:74) by a teacher or volunteer. Partially preparing the RCAC's for the tutors would protect the teachers' editions and save valuable teacher/tutor instructional time.

Since cross-age tutoring has been shown to benefit both age groups at the same time, while having the added benefit of improving the students' attitudes toward reading, this researcher believes cross-age tutoring programs should be expanded and become an integral part of this school site's School Wide Improvement Plans. During the next school year, this researcher plans to expand the project using whole classes to determine if the positive benefits continue when using larger numbers of students. If the benefits continue, this researcher plans to approach this targeted school site's School Wide Improvement Team with an expanded plan of implementation for the following school year.

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Appendices

Appendix A

Parent Survey

APPENDIX A

Parent/Guardian Survey

1. Please circle the highest grade/degree you completed.

Adult #1

7 8 9 10 11 12

Associate's Degree

Bachelor's Degree

Other:_____

Please circle the highest grade/degree you completed

Adult #2

7 8 9 10 11 12

Associate's Degree

Bachelor's Degree

Other:_____

2. Please circle the **one** response below that best describes how often this child was read to or with at each age.

Birth - 5 years	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never
Kindergarten	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never
First grade	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never
Second grade	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never
Third grade	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never
Fourth grade	0 - 1 hr. daily	0 - 1 hr. weekly	sometimes	rarely	almost never

3. How often does this child read for pleasure at home?

0 - 1 hr. daily | 0 - 1 hr. weekly | sometimes | rarely | almost never

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Appendix B

Teacher Survey

Grade_____

TEACHER SURVEY

1. Approximately how many students in your class are reading below grade level? (Ex. 15 out of 20)

___ out of __

2. Read the statements below regarding these below average readers and circle the response that best fits your belief about this problem.

Based on your observation, parent conferences, and other sources:

a. More than likely, these students have not been read to or with consistently at home. strongly agree agree disagree strongly disagree

b. The curriculum does not fully meet these students' reading needs inhibiting them from progressing at an average rate. strongly agree agree disagree strongly disagree

c. One-on-one instruction would be helpful to these students strongly agree agree disagree strongly disagree

d. Their parents do not seem to give them one-on-one help with their homework on a consistent basis. strongly agree agree disagree strongly disagree

Appendix C

Reading Comprehension Awareness Checklist

APPENDIX C

Reading Comprehension Awareness Checklist

Student's name _____ Date_____

Page #___

Question:_____

Type of question: right there____
think and search____
in my head_____

1. **Read** the guided reading question.

2. **Ask** the student to answer the question and check the appropriate response below.

____ Did not know the answer. (0 points)

____ Knew the answer:

(3 point) ___ Could **not** adequately explain **how** he/she figured out the answer.
(5 points)___ Provided a **poor** explanation of how he/she figured out the answer.
(7 points)___ Provided a **good** explanation of how he/she figured out the answer.

3. **Ask:** What type of reading comprehension question do you think was asked? **Mark** the student's answer.

_____ right there question
_____ think and search question
_____ in my head question

Add 3 point for the right answer. _____

4. **Total points** _____

COMMENTS:

Appendix D

Context Clues Chart

APPENDIX D

CONTEXT CLUES (C. C.) CHART

Page#_____

Word Column 1	Knew the word Column 2	Used C. C. Column 3	Couldn't figure out Column 4

Points- Give 5 points for each check in columns 2 or 3.

Your name _____ Student's name _____

Total points _____

Appendix E

Collier Reading Attitude Inventory

APPENDIX E

Collier Reading Attititude Inventory

Name_____ Grade_____ Date_____

Circle the response that best describes your reading habits.

1. I read at home in the evenings.	very much	a lot	not much	almost never	never
2. I read at home in the daytime.	very much	a lot	not much	almost never	never
3. I talk to my friends about stories I read.	very much	a lot	not much	almost never	never
4. I talk to my family about stories I read.	very much	a lot	not much	almost never	never
5. I enjoy reading books.	very much	a lot	not much	almost never	never
6. After reading stories, I feel like I really understand what I have read.	very much	a lot	not much	almost never	never

7. When I have spare time at home, I really like to _____.

Appendix F

Story Map

APPENDIX F

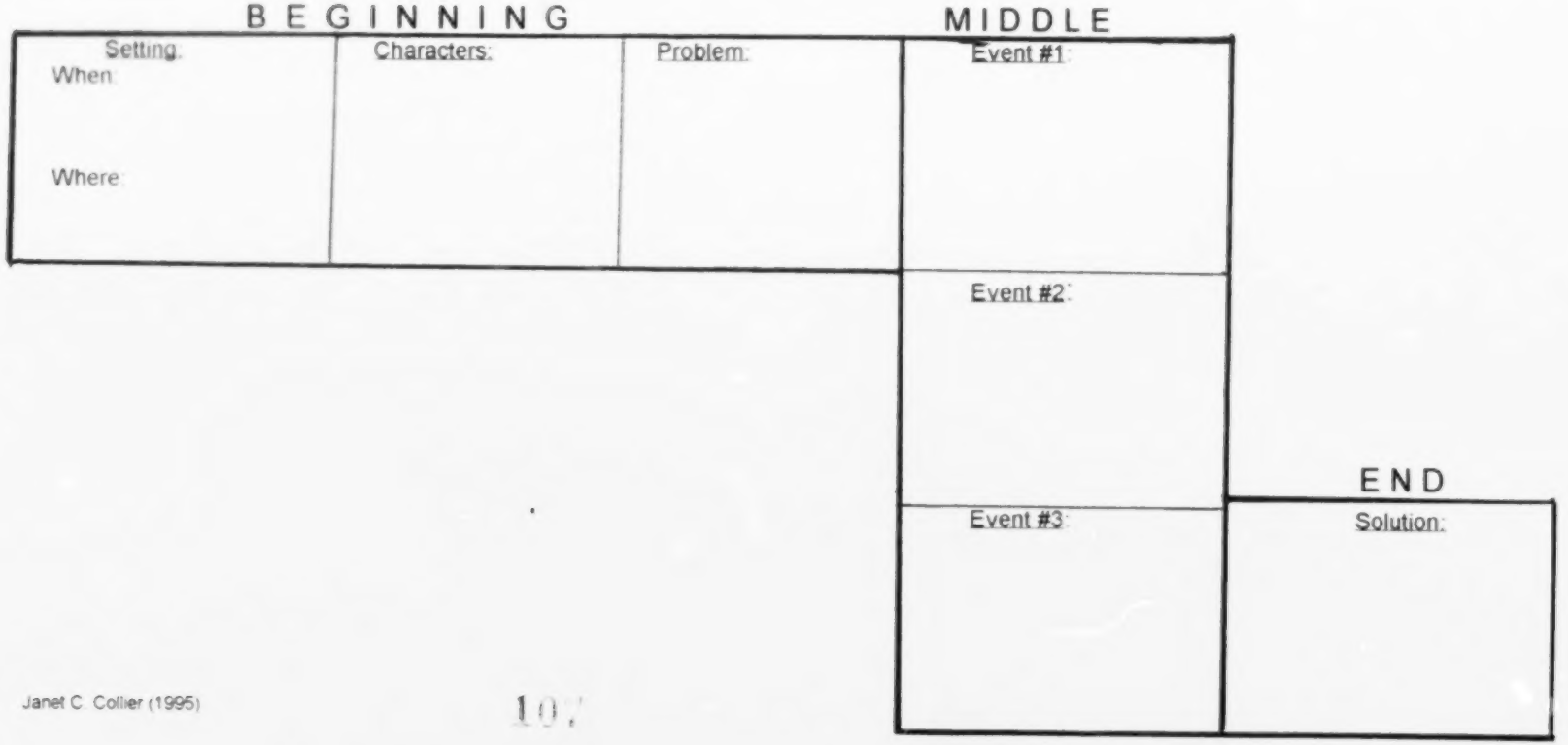
STORY MAP

Names _____ 4th grader
_____ 2nd grader

Date_____

Title _____

Author_____



Janet C. Collier (1995)

Appendix G

Silver Burdett & Ginn Permission

S I L V E R B U R D E T T G I N N

A Simon & Schuster Education Group

January 4, 1995

Ms. Janet C. Collier
c/o Gibsonton Elementary School
7723 Gibsonton Drive
Gibsonton, Florida 33534

Dear Ms. Collier:

Thank you for your fax request of today. As I indicated in our second telephone conversation, because a number of stories in the Teacher Editions were reproduced by permission, we are not granting you permission to reproduce ten stories themselves but only the Guided Reading questions for ten stories in the Grade 2 Teacher Editions (Grade 2/1, Garden Gates, and Grade 2/2, Going Places) of the WORLD OF READING, 1989, for use in your cross-age tutoring project for your Master's degree. You may have permission to reproduce these questions with the following provisions:

(1) that acknowledgment be printed on each copy as follows:

From (Title of Book) of the WORLD OF READING program, © 1989 Silver Burdett Ginn Inc. Used with permission.

(2) that you make only enough copies for your Master's degree practicum, estimated at five

(3) that the copies be used in the Gibsonton Elementary School only and not be sold or distributed to any other school or school system.

Best wishes for the success of your project.

Sincerely yours,

Janet D. McCarthy
Permissions Editor

jdm

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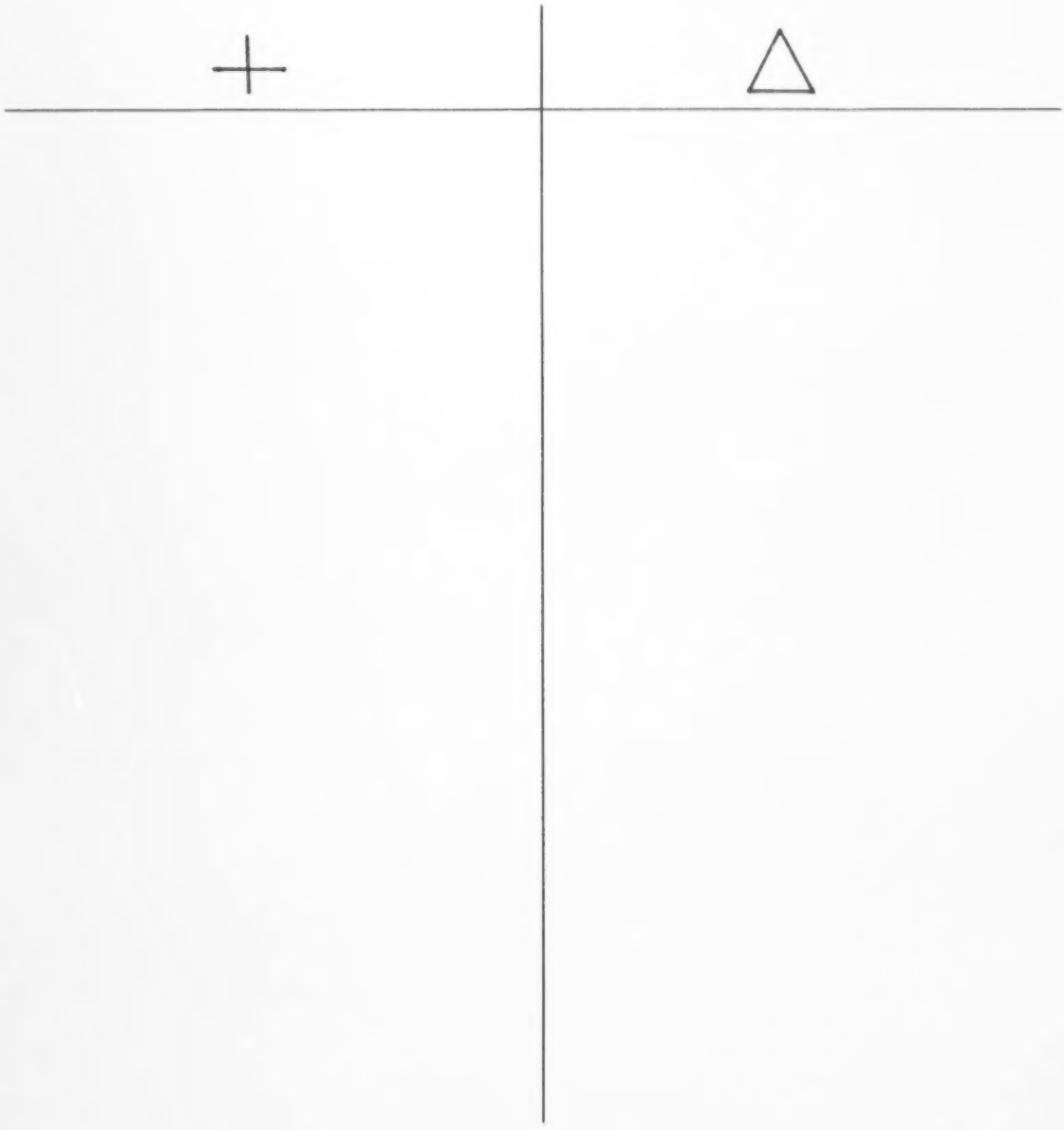
Appendix H

Plus/Delta Meeting Form

APPENDIX H

Plus/Delta Meeting Form

Date_____



APPENDIX H

Plus/Delta Meeting Form

Date_____